DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-029098 Address: 333 Burma Road **Date Inspected:** 07-Feb-2013

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: **USA Hoist Location:** USA Hoist, Crest Hill, IL

CWI Name: Robert Zimny **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A

N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** SAS Tower Elevator

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at USA Hoist, Crest Hill, IL as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At USA Hoist fabrication shop, this QA randomly observed USA Hoist certified welder Manolo Luna continuing to perform fillet welding stiffener plate to C-channel intended for tower elevator door enclosure stops 1, 4 and 5 and door enclosure stops 2, 3 and 6. The welder was noted welding at 2F (horizontal) position utilizing gas shielded Flux Cored Arc Welding (FCAW-G). The fillet welding connection is between the C-channels C200 x 20. 5/C180 x 18.2 inside web/flange and 10mm thick stiffener plate. The 6mm fillet is being welded on six (6) sides of the stiffener to the channel per USA Hoist shop drawing 914911 and 914925.

The welder was noted using gas shielded FCAW-G with 1.1mm E71T-1C Familiarc DW-50 wire electrode implementing USA Hoist Welding Procedure Specification FCAW3210. The shielding gas being used was noted a combination of 75% Argon and 25% CO2 with flow rate of 35 CFH. During the shift, the welding parameters were measured 26 volts and 190 amperes which deemed in compliance to the project requirements.

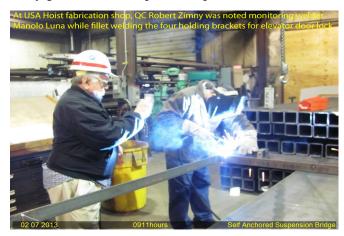
After the welding completion of the two stiffener plates welded on C200 x 20.5 on one side and C180 x 18.2 on the other side, the welder performed another fillet welding on four (4) 90 long x 40 wide x 5mm thick brackets to the C200 x 20.5 web plate. The four 5mm thick bracket plates are intended for holding the tower elevator door lock in place and they are being welded per USA Hoist shop drawing number 914910. The welder was noted 1/8" fillet welding all around the bracket to the web/flange plate using the same process and implementing the same

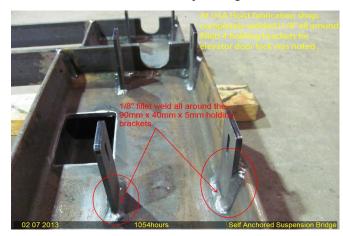
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welding procedure mentioned above.

With the 6mm fillet welding performed on two (2) stiffener plates and 3mm fillet welding all around the four (4) holding brackets for the door lock on the last two (2) elevator stop door enclosures, these should complete all the six (6) elevator door stops from 1 thru 6. USA Hoist QC Mr. Robert Zimny was present today and he performed visual test (VT) and at the same time measured the required size of the fillet welds that were welded on the stiffener plates and holding brackets. After the completion of inspection by Mr. Zimny wherein he found all the fillet weld joints acceptable, this QA performed verification on the same welded joints and noted same result. Mr. Zimny generated his inspection report and forwarded them to Mr. Tim Moran USA Hoist Project Engineer.





Summary of Conversations:

No significant conversation occurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo, Joselito	Quality Assurance Inspector
Reviewed By:	Foerder, Mike	QA Reviewer